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Approval # 20110003

Environmental & Regulatory Services Division
Bureau of Petroleum Products and Tanks
201 West Washington Avenue
P.O. Box 7837
Madison, WI 53707-7837

Wisconsin COMM 10 Material Approval

Equipment: Models DCS140L Latching Float Switch and DCS140NL Non-latching Float Switch for use with the MPC100 Controller

Manufacturer: Beaudreau Electric Marketing, LLC
100 Mechanic St.
Pawcatock, CT 06379

Expiration of Approval: December 31, 2013

SCOPE OF EVALUATION

The Models DCS140L Latching Float Switch and DCS140NL Non-latching Float Switch for use with the MPC100 Controller as manufactured by Beaudreau Electric Marketing, LLC for leak detection of sumps and double-wall pipe systems, has been evaluated for use as a method of sump monitoring complying with **ss. Comm 10.500(5)** and interstitial monitoring complying with **ss. COMM 10.515(7)** of the current edition of the Wisconsin Flammable and Combustible Liquids Code.

This evaluation summary is condensed to provide the specific installation, application and operation parameters necessary to maintain the subject systems in compliance with the Wisconsin Administrative Code – Comm 10.

DESCRIPTION AND USE

The Models DCS140L Latching Float Switch and DCS140NL Non-latching Float Switch for use with the MPC100 Controller are part of Beaudreau Electric Marketing's LD140 and PL140 Stand-Alone Sump Liquid Sensor-controller Kits. These are stand-alone, two-part solid state systems which includes a controller and sensor, designed to automatically shut down product flow if liquid is detected inside containment spaces.

The LD140 and PL140 kits can be mounted inside any turbine sump, providing complete pump shut down; or mounted directly into dispenser sumps, allowing only the effected dispenser to be shut down as liquid is detected. Two liquid sensor options, latching and non-latching, allow either automatic reset of the system or manual, once liquid has been removed from the effected sump.

The DCS140L is a latching float switch sensor designed to latch into the alarm position and cut-off power when the internal float rises in the liquid. The DCS140L sensor must be manually reset once liquid has been removed from the containment sump.

The DCS140NL is a non-latching float switch sensor designed to activate into the alarm position and cut-off power when the internal float rises in the liquid. The DCS140NL sensor is automatically reset once liquid has been removed from the containment sump.

The MPC100 controller can be mounted inside any containment sump and connected to the existing turbine or dispenser wiring. To provide leak detection liquid sensing, either the DCS140L or DCS140NL liquid sensor can be connected on the end of the controller and placed in the bottom of the containment sump.

The DCS140L or DCS140NL sensors may be used on systems that contain gasoline, diesel, biodiesel up to B20, B100, alcohol mixtures up to 100% and with manufacturer's approval, other liquids with a known density.

TESTS AND RESULTS

All sensors are intrinsically safe and are Listed for Class I, Division 1 hazardous (classified) locations. The MPC100 controller is of an explosion proof design and Listed for Class I, Division 1 hazardous (classified) locations.

Third-party testing of the liquid sensors was conducted in accordance with the Alternative EPA Test procedures for Liquid Level Sensors protocol.

LIMITATIONS / CONDITIONS OF APPROVAL

- All monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer instructions, and verified every 12 months in accordance with **ss. Comm 10.510(2)** for operability, proper operating condition, and proper calibration if required. Records of sampling, testing, or monitoring shall be maintained in accordance with **Comm 10.500(9)**.

- The manufacturer shall submit for a revision to this Wisconsin Material Approval application if any of the functional performance capabilities of this equipment are revised. This would include, but not be limited to changes in software, hardware, or methodology.

- The liquid sensors shall be placed in the lowest point in the sump such that a release from the submersible pump, dispenser, or sump piping will be detected.

- For monitoring of double-wall piping, the liquid sensors shall be placed such that a release from any portion of the piping will be detected.

This approval will be valid through December 31, 2013, unless manufacturing modifications are made to the product or a re-examination is deemed necessary by the department. The Wisconsin Material Approval Number must be provided when plans that include this product are submitted for review.

DISCLAIMER

The Department is in no way endorsing or advertising this product. This approval addresses only the specified applications for the product and does not waive any code requirement unless specified in this document.

Effective Date: 04/13/2011

Reviewed by: Signature on File
Greg Bareta, P. E.
Engineering Consultant
Bureau of Petroleum Products and Tanks

Approved by: Signature on File Date: _____